REMARKS

The present application includes pending claims 1-29, of which, claims 1-12, and 14-29 have been rejected. Claim 13 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. By this Amendment, claims 1, 5, 6, 9, 14, 23, and 27-29 have been amended as set forth above. The Applicant respectfully submits that the claims define patentable subject matter.

The Office Action notes limitations following the term "adapted to" are not considered because they are not positively recited limitations. The Applicant has amended claim 23 to remove "adapted to" from the recited language.

The Applicant has amended the specification as noted above to include the application number of the noted patent applications. No new matter has been added.

The Office Action objected to claims 1, 5, 6, 9, 14, and 27-29 for some informalities. In order to expedite prosecution, the Applicant has amended these claims as suggested by the Examiner.

Claims 1, 4-12, and 14-22 stand rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Application Publication 2002/0034182 ("Mallory"). Claims 23-29 stand rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent Application Publication 2003/0046330 ("Hayes"). Claims 2-3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory in view of Hayes. The Applicant respectfully traverses these rejections at least for the following:

I Mallory Does Not Anticipate Claims 1, 4-12, and 14-22

Mallory "relates to communications systems in general and, more specifically, to methods and apparatus for reducing data loss on a network with an unreliable physical layer." *See* Mallory at Paragraph [0001].

Claim 1 of the present application recites, in part, "managing information relating to one or more holes in a receive window." Claim 17 of the present application recites, in part, "managing receive window hole information."

The Office Action cites Paragraphs [0060], [0140], and [0141] of Mallory as evidence of the limitations noted above. Paragraph [0060] of Mallory recites the following:

> If the next higher layer does not require frames to be delivered in order, the LARQ handler will pass up frames as they are received, rather than storing the out of order frames. However, where the next higher layer requires frames in order, or assumes the loss of frames if they are out of order, the LARQ handler should be configured to buffer frames following a gap for a time in a reorder buffer so that if the receiver can fill the gap with retransmitted frames in time, the frames can be passed to the next layer in sequence order.

This paragraph merely discloses that out-of-order frames may be stored in a buffer, but does not teach or suggest "placing data of the out-of-rder frame in a **host** memory," or "managing information relating to one or more holes in a receive window."

Mallory, at Paragraph [0140] states the following:

> If a received frame's sequence number (not a Nack control frame) is new and within a window of MaxRxSaveCountChannel from Receive Sequence

> Number, the receiver will update its state by advancing the window of recent sequence numbers until the received frame's sequence number is current. If the received frame's new sequence number was outside of the valid sequence numbers, the sequence number should have been treated as out-of-sequence, and the channel reset function performed so that the new frame will be in-sequence.

This portion of Mallory merely states that a frame's sequence number may be within a window of MaxRxSaveCountChannel. While the "receiver will update its state by advancing the window of recent sequence numbers until the received frame's sequence number is current," this portion of Mallory does not teach, nor suggest, "placing data of the out-of-rder frame in a host memory," or "managing information relating to one or more holes in a receive window," as recited in claim 1, nor "determin[ing] a buffer location in a host memory in which to place the data information," or "managing receive window hole information," as recited in claim 17. Instead, this portion of Mallory merely discloses that windows are advanced based on their sequence numbers.

Paragraph [0140] of Mallory states the following:

> The Receive Sequence Number is repeatedly incremented by 1 (modulo 256, or other size of the sequence space) until it is equal to the received frame's sequence number. Each time it is updated, the state of the new current sequence number is initialized as missing and the time when it was first missed is recorded, unless the current number is that of the receive frame and the receive frame was a valid data frame (not a reminder and not errored). **If the frame is marked received, it is also saved,** possibly temporarily. For each new sequence number, **the trailing edge of the sliding window of recent sequence numbers also changes.** The new oldest recent sequence number is checked to see

> there is a held frame. If there is a saved frame (Rx Frame Flag=1), that frame is sent up to next higher layer and Rx Frame Flag is set to 0. When the current sequence number has been fully updated to the received sequence number, the receiver then scans the history of recent frames, starting with the oldest sequence number not yet lost or sent up. If that sequence number has a held frame, then that frame and any in-sequence held frames that follow it are sent up to the next higher layer. This will result in the just-received frame to be sent up to the next higher layer, if appropriate.

This portion of Mallory merely discloses that sequence numbers are repeatedly incremented, and that received frames are saved. While "trailing edges of sliding windows of recent sequence numbers also change," there is nothing in this portion of Mallory that teaches or suggests "placing data of the out-of-order frame in a host memory," "managing information relating to one or more holes in a receive window," as recited in claim 1, nor "managing receive window hole information," as recited in claim 17. The Applicants respectfully submit that a change in the sequence number of a sliding window is by no means "managing information relating to one or more holes in a receive window," or "managing receive window hole information."

In short, while these portions of Mallory disclose that certain frames may be saved, they do not teach, nor suggest, "placing data of the out-of-order frame in a host memory," "managing information relating to one or more holes in a receive window," as recited in claim 1, nor "managing receive window hole information," as recited in claim 17. Thus, at least for this reason, the Applicant respectfully submits that Mallory does not anticipate claims 1, 4-12, and 14-22.

II. Hayes Does Not Anticipate Claims 23-29

Hayes relates to "methods and apparatus for selective offloading of protocol processing from a host CPU to an offloading auxiliary processor." Hayes at Paragraph [0017]. Hayes, however, does not teach or suggest "wherein the network subsystem processes an out-of-order frame, wherein the network subsystem places data of the out-of-order frame in a host memory," or "wherein the network subsystem manages information relating to one or more holes in a receive window," as recited in claim 23, as amended. Thus, the Applicant respectfully submits that Hayes does not anticipate claims 23-29 at least for these reasons.

III. The Combination Of Mallory And Hayes Does Not Render Claims 2-3 Unpatentable

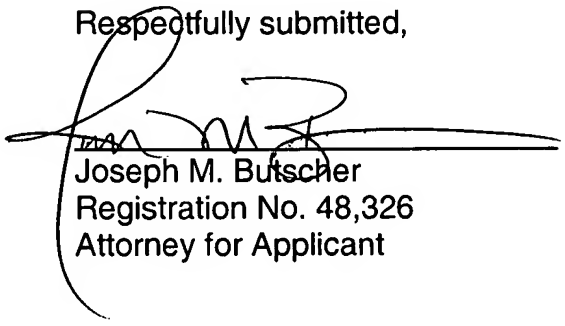
The Applicant now turns to the rejection of claims 2-3 as being unpatentable over Mallory in view of Hayes. The Applicant respectfully submits that these claims should be in condition for allowance at least for the reasons discussed above.

IV. Conclusion

The Applicant respectfully submits that the claims of the present application should be in condition for allowance at least for the reasons discussed above and requests that the outstanding rejections be reconsidered and withdrawn. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the Applicant. The Commissioner

is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,



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